Toxicology, 52 (1988) 347—350
Elsevier Scientific Publishers Ireland Ltd.

TOXICOLOGY

SUBJECT INDEX

Volume 52 (1988)

acetaminophen, liver, DMSO, covalent binding, hepatotoxicity, 165
acetylcholinesterase/inhibition, fasting, glucose, insulin, corticosterone, catecholamines, 323
aerosol, toxic particle, alveolar cell, lysosomes, microanalysis, 127
aflatoxin, cyclopiazonic acid, toxicity, primates, 297
airway reactivity, histamine inhalation, pulmonary sensitivity, model, body plethysmography, pulmonary function testing, 141
alkylating agents, biological effect monitoring, glutathione, hemoglobin, sulfhydryl groups, 177
alpha$_{2u}$, hyaline droplets, globulin, hydrocarbon, drugs, rat, kidney morphology, 81
alveolar cell, aerosol, toxic particle, lysosomes, microanalysis, 127
anion transport, ochratoxin A, nephrotoxins, renal slice transport, 209
antioxidants, glutathione, butylated hydroxyanisole, butylated hydroxytoluene, choleresis, 225
L-ascorbic acid, ascorbyl palmitate, covalent binding, hepatotoxicity, mouse, paracetamol, 287
ascorbyl palmitate, covalent binding, hepatotoxicity, L-ascorbic acid, mouse, paracetamol, 287

biological effect monitoring, alkylating agents, glutathione, hemoglobin, sulfhydryl groups, 177
body plethysmography, airway reactivity, histamine inhalation, pulmonary sensitivity, model, pulmonary function testing, 141
brain, catcholamines, hormones, protein phosphorylation, receptor-receptor interactions, toluene, 103
butylated hydroxyanisole, glutathione, butylated hydroxytoluene, antioxidants, choleresis, 225
butylated hydroxytoluene, glutathione, butylated hydroxyanisole, antioxidants, choleresis, 225

calcium, menadione, *tert*-butyl hydroperoxide, hepatocytes, oxidative stress, toxicity, 55
carcinogenesis, rat, nickel subsulfide, zinc oxide, zinc acetate, 253
cardiotoxins, myocardial cell cultures, green mamba venom, membrane lytic polypeptides, cytolytic proteins, 187
catcholamines, brain, hormones, protein phosphorylation, receptor-receptor interactions, toluene, 103
catecholamines, acetylcholinesterase/inhibition, fasting, glucose, insulin, corticosterone, 323
chelation, oral cadmium intoxication, tissue damage, peristalic toxicity, whole-body retention, intestinal absorption, DTPA, 65
choleresis, glutathione, butylated hydroxyanisole, butylated hydroxytoluene, antioxidants, 225
concentration kinetics, lindane, convulsant doses, convulsant brain concentrations, physiological variables, 309
convulsant brain concentrations, lindane, convulsant doses, concentration kinetics, physiological variables, 309
convulsant doses, lindane, convulsant brain concentrations, concentration kinetics, physiological variables, 309
corticosterone, acetylcholinesterase/inhibition, fasting, glucose, insulin, catecholamines, 323
covalent binding, acetaminophen, liver, DMSO, hepatotoxicity, 165

covalent binding, ascorbyl palmitate, hepatotoxicity, L-ascorbic acid, mouse, paracetamol, 287
cyclopiazonic acid, aflatoxin, toxicity, primates, 297
cytolytic proteins, myocardial cell cultures, green mamba venom, cardiotoxins, membrane lytic polypeptides, 187

DDC, oral cadmium, peristaltic toxicity, tissue damage, intestinal absorption, organ distribution, 331
dexamethasone, hepatocytes, triglyceride accumulation, fatty liver, 273
DMSO, acetaminophen, liver, covalent binding, hepatotoxicity, 165
drugs, hyaline droplets, alpha$_{2u}$, globulin, hydrocarbon, rat, kidney morphology, 81
DTPA, oral cadmium intoxication, tissue damage, peristalic toxicity, whole-body retention, intestinal absorption, chelation, 65

effects of chelators, heavy metals, rat jejunum, rabbit erythrocytes, membrane-bound metals, transmembrane transfer, 263

fasting, acetylcholinesterase/inhibition, glucose, insulin, corticosterone, catecholamines, 323
fatty liver, hepatocytes, triglyceride accumulation, dexamethasone, 273

globulin, hyaline droplets, alpha$_{2u}$, hydrocarbon, drugs, rat, kidney morphology, 81
glucose, acetylcholinesterase/inhibition, fasting, insulin, corticosterone, catecholamines, 323
glutathione, alkylating agents, biological effect monitoring, hemoglobin, sulfhydryl groups, 177
glutathione, butylated hydroxyanisole, butylated hydroxytoluene, antioxidants, choleresis, 225
green mamba venom, myocardial cell cultures, cardiotoxins, membrane lytic polypeptides, cytolytic proteins, 187

heavy metals, rat jejunum, rabbit erythrocytes, membrane-bound metals, transmembrane transfer, effects of chelators, 263
hemoglobin, alkylating agents, biological effect monitoring, glutathione, sulfhydryl groups, 177
hepatocytes, menadione, *tert*-butyl hydroperoxide, calcium, oxidative stress, toxicity, 55
hepatocytes, triglyceride accumulation, fatty liver, dexamethasone, 273
hepatotoxicity, acetaminophen, liver, DMSO, covalent binding, 165
hepatotoxicity, ascorbyl palmitate, covalent binding, L-ascorbic acid, mouse, paracetamol, 287
histamine inhalation, airway reactivity, pulmonary sensitivity, model, body plethysmography, pulmonary function testing, 141
hormones, brain, catcholamines, protein phosphorylation, receptor-receptor interactions, toluene, 103
hyaline droplets, alpha$_{2u}$, globulin, hydrocarbon, drugs, rat, kidney morphology, 81
hydrocarbon, hyaline droplets, alpha$_{2u}$, globulin, drugs, rat, kidney morphology, 81

insulin, acetylcholinesterase/inhibition, fasting, glucose, corticosterone, catecholamines, 323
intestinal absorption, oral cadmium, peristaltic toxicity, tissue damage, organ distribution, DDC, 331
intestinal absorption, oral cadmium intoxication, tissue damage, peristalic toxicity, whole-body retention, chelation, DTPA, 65

kidney morphology, hyaline droplets, alpha$_{2u}$, globulin, hydrocarbon, drugs, rat, 81
lindane, convulsant doses, convulsant brain concentrations, concentration kinetics, physiological variables, 309
liver, acetaminophen, DMSO, covalent binding, hepatotoxicity, 165
lysosomes, aerosol, toxic particle, alveolar cell, microanalysis, 127

membrane-bound metals, heavy metals, rat jejunum, rabbit erythrocytes, transmembrane transfer, effects of chelators, 263
membrane lytic polypeptides, myocardial cell cultures, green mamba venom, cardiotoxins, cytolytic proteins, 187

menadione, *tert*-butyl hydroperoxide, hepatocytes, calcium, oxidative stress, toxicity, 55
methyl methacrylate inhalation, olfactory epithelium degeneration, 237
microanalysis, aerosol, toxic particle, alveolar cell, lysosomes, 127
model, airway reactivity, histamine inhalation, pulmonary sensitivity, body plethysmography, pulmonary function testing, 141
mouse, ascorbyl palmitate, covalent binding, hepatotoxicity, L-ascorbic acid, paracetamol, 287
myocardial cell cultures, green mamba venom, cardiotoxins, membrane lytic polypeptides, cytolytic proteins, 187

nephrotoxins, ochratoxin A, anion transport, renal slice transport, 209
nickel subsulfide, rat, carcinogenesis, zinc oxide, zinc acetate, 253

ochratoxin A, nephrotoxins, anion transport, renal slice transport, 209
olfactory epithelium degeneration, methyl methacrylate inhalation, 237
oral cadmium, peristaltic toxicity, tissue damage, intestinal absorption, organ distribution, DDC, 331
oral cadmium intoxication, tissue damage, peristaltic toxicity, whole-body retention, intestinal absorption, chelation, DTPA, 65
organ distribution, oral cadmium, peristaltic toxicity, tissue damage, intestinal absorption, DDC, 331
oxidative stress, menadione, *tert*-butyl hydroperoxide, hepatocytes, calcium, toxicity, 55

paracetamol, ascorbyl palmitate, covalent binding, hepatotoxicity, L-ascorbic acid, mouse, 287
peristalic toxicity, oral cadmium intoxication, tissue damage, whole-body retention, intestinal absorption, chelation, DTPA, 65
peristaltic toxicity, oral cadmium, tissue damage, intestinal absorption, organ distribution, DDC, 331
physiological variables, lindane, convulsant doses, convulsant brain concentrations, concentration kinetics, 309
primates, aflatoxin, cyclopiazonic acid, toxicity, 297
protein phosphorylation, brain, catcholamines, hormones, receptor-receptor interactions, toluene, 103
pulmonary function testing, airway reactivity, histamine inhalation, pulmonary sensitivity, model, body plethysmography, 141
pulmonary sensitivity, airway reactivity, histamine inhalation, model, body plethysmography, pulmonary function testing, 141

rabbit erythrocytes, heavy metals, rat jejunum, membrane-bound metals, transmembrane transfer, effects of chelators, 263
rat, carcinogenesis, nickel subsulfide, zinc oxide, zinc acetate, 253
rat, hyaline droplets, alpha$_{2u}$, globulin, hydrocarbon, drugs, kidney morphology, 81
rat jejunum, heavy metals, rabbit erythrocytes, membrane-bound metals, transmembrane transfer, effects of chelators, 263
reactive metabolites, target-organ toxicity, 1
receptor-receptor interactions, brain, catcholamines, hormones, protein phosphorylation, toluene, 103
renal slice transport, ochratoxin A, nephrotoxins, anion transport, 209

sulfhydryl groups, alkylating agents, biological effect monitoring, glutathione, hemoglobin, 177

target-organ toxicity, reactive metabolites, 1
tert-butyl hydroperoxide, menadione, hepatocytes, calcium, oxidative stress, toxicity, 55
tissue damage, oral cadmium, peristaltic toxicity, intestinal absorption, organ distribution, DDC, 331
tissue damage, oral cadmium intoxication, peristaltic toxicity, whole-body retention, intestinal absorption, chelation, DTPA, 65
toluene, brain, catcholamines, hormones, protein phosphorylation, receptor-receptor interactions, 103
toxicity, aflatoxin, cyclopiazonic acid, primates, 297
toxicity, menadione, *tert*-butyl hydroperoxide, hepatocytes, calcium, oxidative stress, 55

toxic particle, aerosol, alveolar cell, lysosomes, microanalysis, 127
transmembrane transfer, heavy metals, rat jejunum, rabbit erythrocytes, membrane-bound metals, effects of chelators, 263
triglyceride accumulation, hepatocytes, fatty liver, dexamethasone, 273

whole-body retention, oral cadmium intoxication, tissue damage, peristaltic toxicity, intestinal absorption, chelation, DTPA, 65

zinc acetate, rat, carcinogenesis, nickel subsulfide, zinc oxide, 253
zinc oxide, rat, carcinogenesis, nickel subsulfide, zinc acetate, 253

Toxicology, 52 (1988) 351–352
Elsevier Scientific Publishers Ireland Ltd.

TOXICOLOGY

AUTHOR INDEX

Volume 52 (1988)

Acosta, D. 187
Agnati, L.F. 103
Andersen, O. 65, 331
Astbury, P.J. 81

Bellomo, G. 55
Berry, J.P. 127
Brinn, R. 209

Chan, P.C. 237
Close, P.M. 297
Cole, R.J. 297
Combs, A.B. 165

De Lourdes Lopez, M. 273

Eneroth, P. 103
Escaig, F. 127
Eustis, S.L. 237
Evelo, C.T.A. 177

Fletcher, H.P. 323
Foulkes, E.C. 263
Friis, C. 209
Fuxe, K. 103

Galle, P. 127
Gustafsson, J.-A. 103

Haldi, B. 209
Hansson, T. 103
Harfstrand, A. 103
Hargreaves, R.J. 287
Haseman, J.K. 237
Henderson, P.Th. 177
Hernandez, A. 273
Huff, J.E. 237

Jaeschke, H. 225
Jaskiewicz, K. 297
Jonker, D. 287

Karol, M.H. 141
Kasprzak, K.S. 253
Kehrer, J.P. 165
Kovatch, R.M. 253
Kuri-Harcuch, W. 273

Lake, B.G. 287
Lau, S.S. 1
Lee, V.S. 287

Mbugua, P.M. 187
McConkey, D. 55
Meignan, M. 127
Mendoza-Figueroa, T. 273
Monks, T.J. 1
Morgan, R.J.I. 81

Nicotera, P. 55
Nielsen, J.B. 65, 331
Noble, S.A. 323

Ogren, S.-O. 103
Orrenius, S. 55

Park, Y. 165
Parsons, D.N. 81
Poirier, L.A. 253
Port, C.J. 81
Portig, J. 309

Ragan, H. 237
Read, N.G. 81
Rinn, R. 209

Schnorr, C. 309
Smith, R.D. 165
Spratto, G.R. 323
Svendsen, P. 65, 331

Svensson, S.-Å. 55
Thiel, P.G. 297
Thorne, P.S. 141
Von Euler, G. 103
Welder, A.A. 187
Wendel, A. 225

Toxicology, 52 (1988) 353–355
Elsevier Scientific Publishers Ireland Ltd.

TOXICOLOGY

CONTENTS

Volume 52

Review Paper

Reactive intermediates and their toxicological significance
by T.J. Monks and S.S. Lau (Smithville and Austin, TX) 1–53

Research Papers

Correlation between cytosolic Ca^{2+} concentration and cytotoxicity in hepatocytes exposed to oxidative stress (**The data point to a relation between cytosolic Ca^{2+} and cellular damage**)
by P. Nicotera, D. McConkey, S.-Å. Svensson, G. Bellomo and S. Orrenius (Stockholm, Sweden) 55–63

Oral cadmium chloride intoxication in mice: effects of chelation (Chelator complexes modify the primary intestinal effects of cadmium according to their physico-chemical properties)
by O. Andersen, J.B. Neilsen and P. Svendsen (Odense, Denmark) 65–79

Induction and exacerbation of hyaline droplet formation in the proximal tubular cells of the kidneys from male rats receiving a variety of pharmacological agents (**Some compounds of potential pharmacological value cause a conspicuous histological alteration in renal tubular cells — only in male but not in female animals**)
by N.G. Read, P.J. Astbury, R.J.I. Morgan, D.N. Parsons and C.J. Port (Kent, U.K.) 81–101

Effects of chronic toluene exposure on central monoamine and peptide receptors and their interactions in the adult male rat (**Characteristic changes by toluene in various brain areas and functions are described**)
by G. von Euler, K. Fuxe, T. Hansson, S.-O. Ögren, L.F. Agnati, P. Eneroth, A. Härfstrand and J.-Å. Gustafsson (Stockholm, Huddinge and Södertälje, Sweden and Modena, Italy) 103–126

Inhaled soluble aerosols insolubilised by lysosomes of alveolar cells. Application to some toxic compounds; electron microprobe and ion microprobe studies (**Metals from aerosols are deposited as insoluble phosphates in alveolar cells**)
by J.P. Berry, M. Meignan, F. Escaig and P. Galle (Créteil, France) 127–139

Assessment of airway reactivity in guinea pigs: comparison of methods employing whole body plethysmography (**Exposure to stepped doses of histamine in air is the preferred procedure**)
by P.S. Thorne and M.H. Karol (Pittsburgh, PA) 141–163

Prevention of acetaminophen-induced hepatotoxicity by dimethyl sulfoxide
by Y. Park, R.D. Smith, A.B. Combs and J.P. Kehrer (Austin, TX) 165–175

Influence of glutathione on the formation of cysteine alkylation products in human hemoglobin (**Variation in glutathione protection complicates the extrapolation from hemoglobin alkylation to DNA dealkylation**)
by C.T.A. Evelo, P.Th. Henderson (Nijmegen, The Netherlands) 177–186

Cardiotoxicity of Kenyan green mamba (*Dendroaspis Angusticeps*) venom and its fractionated components in primary cultures of rat myocardial cells (**Green mamba venom induces arrhythmias and structural damage which may lead to persistent myocardial dysfunction**)
by P.M. Mbugua, A.A. Welder and D. Acosta (Austin, TX) 187–207
Uptake of ochratoxin A by slices of pig kidney cortex (**The nephrotoxin is accumulated in the tissue and seems to be transported by the organic anion transport system**)
by C. Friis, R. Brinn and B. Hald (Frederiksberg, Denmark) 209–217
Book Review 219–222
Contents of journals relating to Toxicology 223–224
Choleresis and increased biliary efflux of glutathione induced by phenolic antioxidants in rats (**GSH efflux from hepatic cells seems to be redirected towards a more biliary efflux**)
by H. Jaeschke and A. Wendel (Tuebingen, F.R.G.) 225–235
Two-year inhalation carcinogenesis studies of methyl methacrylate in rats and mice: Inflammation and degeneration of nasal epithelium (**Methyl methacrylate produced inflammation and hyperplasia of the nasal epithelium, but no tumors**)
by P.C. Chan, S.L. Eustis, J.E. Huff, J.K. Haseman and H. Ragan (Research Triangle Park, NC and Richland, WA) 237–252
Inhibitory effect of zinc on nickel subsulfide carcinogenesis in Fischer rats (**Zinc delayed development of primary tumors and reduced tendency to form metastases**)
by K.S. Kasprzak, R.M. Kovatch and L.A. Poirier (Frederick and Ijamsville, MD) 253–262
On the mechanism of transfer of heavy metals across cell membranes (**A model is proposed which describes Cd uptake into the intestine without having to involve a carrier system**)
by E.C. Foulkes (Cincinnati, OH) 263–272
Intracytoplasmic triglyceride accumulation produced by dexamethasone in adult rat hepatocytes cultivated on 3T3 cells (**Corticosteroids cause lipid accumulation in liver cells mostly through a decrease in triglyceride secretion**)
by T. Mendoza-Figueroa, A. Hernandez, M. De Lourdes Lopez and W. Kuri-Harcuch (Mexico City, Mexico) 273–286
Comparison of the effects of ascorbyl palmitate and L-ascorbic acid on paracetamol-induced hepatotoxicity in the mouse (**Ascorbyl palmitate is a good antidote against paracetamol toxicity presumably by increasing availability of ascorbic acid to the liver**)
by D. Jonker, V.S. Lee, R.J. Hargreaves and B.G. Lake (Carshalton, UK and Wageningen, The Netherlands) 287–295
Preliminary studies on toxic effects of cyclopiazonic acid alone and in combination with aflatoxin B_1 in non-human primates (**The mycotoxin has a low toxicity as assessed by histopathology, there is no synergism with aflatoxin B_1**)
by K. Jaskiewicz, P.M. Close, P.G. Thiel and R.J. Cole (Cape Town and Tygergerg, Republic of South Africa and Dawson, GA) 297–307
The potency of gamma-1,2,3,4,5,6-hexachlorocyclohexane (Lindane) (**This is a pharmacokinetic account of the convulsive action of lindane**)
by J. Portig and C. Schnorr (Marburg, F.R.G.) 309–321
Effects of the acetylcholinesterase inhibitor pinacolyl methylphosphonofluoridate (soman) on selected endocrine, glucose and catecholamine levels in fasted and fed rats (**A lack of soman-induced hyperglycemia may enhance soman toxicity**)
by H.P. Fletcher, S.A. Noble and G.R. Spratto (West Lafayette, IN) 323–329
Oral cadmium chloride intoxication in mice: diethyldithiocarbamate enhances rather than alleviates acute toxicity (**Chelation markedly alters cadmium toxicokinetics**)
by O. Andersen, J.B. Nielsen and P. Svendsen (Odense, Denmark) 331–342

Book Review 343–344
Contents of journals relating to Toxicology 345–346
Subject Index Volume 52 347–350
Author Index Volume 52 351–352
Volume Contents Volume 52 353–355